UNITED NATIONS

Framework Convention on Climate Change

Distr.
GENERAL

FCCC/SBSTA/2001/4
24 September 2001

Original: ENGLISH

SUBSIDIARY BODY FOR SCIENTIFIC AND TECHNOLOGICAL ADVICE
Fifteenth session
Marrakesh, 29 October – 9 November 2001
Item 5 of the provisional agenda

DEVELOPMENT AND TRANSFER OF TECHNOLOGIES

Progress report on the development of a technology information system

Note by the secretariat

CONTENTS

			Paragraphs	Page
I.	INTRODUCTION		1 - 7	3
	A.	Mandate	1 - 5	3
	B.	Scope of the note	6	3
	C.	Possible action by the SBSTA	7	3
II.	BACKGROUND		8 - 11	4
III.	DISCUSSION		12- 21	5
	A.	Recent activities	12	5
	B.	Main characteristics and possible use of the technology information system	13- 18	6
	C.	Issues for consideration	19- 21	7

GE.01-64734

Annexes

		Page
I.	Questions relating to the capabilities offered by the current content of the technology information system	8
II.	Questions relating to the performance of the technology information system	8

Appendix

List of abbreviations 10

I. INTRODUCTION

A. Mandate

1. At its first session, the Conference of the Parties requested the secretariat to collect information from relevant sources and to "prepare an inventory and assessment of environmentally sound and economically viable technologies and know-how conducive to mitigating and adapting to climate change. The inventory should also include an elaboration of the terms under which transfer of such technologies and know-how could take place" (FCCC/CP/1995/7/Add.1, decision 13/CP.1, para. 1 (b)). At the same session, the COP further requested the secretariat to update the above information at regular intervals (each interval not to exceed a year) for consideration by the COP at each of its sessions.

2. At its fourth session, the COP requested the secretariat to continue its work on synthesis and dissemination of information on environmentally sound technologies and know-how conducive to mitigating and adapting to climate change.

3. At its twelfth session, the SBSTA noted the progress made in the development of the secretariat web pages and of a pilot project on a technology cooperation projects inventory including both mitigation and adaptation technologies, and it requested the secretariat to make further information available on its web pages.

4. At the first part of its thirteenth session, the above matters were reiterated and the SBSTA requested the secretariat to elaborate further the proposal for activities in this area at the second part of its thirteenth session, taking into account (i) the resource implications of continuing this work at different levels of effort and (ii) the discussions held on this proposal. Subsequently, at the second part of its thirteenth session, the secretariat made available for comments a draft technical paper on this subject.

5. At its fourteenth session, the SBSTA took note of the progress made by the secretariat in developing a technology information system, and invited interested Parties to contact the secretariat for a password which would allow them to access and test the system. It then decided to consider this matter further at its fifteenth session (FCCC/SBSTA/2001/2, para. 24).

B. Scope of the note

6. This note contains information on the ongoing activities of the secretariat in 2001 relating to the development of a technology information system, particularly an inventory of environmentally sound and economically viable technologies and know-how conducive to mitigating and adapting to climate change, and to make information available using a prototype web-based technology.

C. Possible action by the SBSTA

7. The SBSTA may wish to take note of the information in this document, and:

(a) Consider what role Parties should play in supporting the technology information system, including the provision of information to be made available by the system;

(b) Provide further guidance to the secretariat with regard to the design and implementation of the technology information system, and particularly the technology cooperation projects inventory. In considering how to provide such guidance, the SBSTA may wish to determine whether this might be done via a "special" expert meeting on technology information systems or via the expert group on technology transfer anticipated in decision -/CP.6 on development and transfer of technologies forwarded for adoption by the COP at its seventh session (FCCC/CP/2001/5/Add.1).

II. BACKGROUND

8. The secretariat, with support from the Climate Technology Initiative (CTI) and the Government of the United States, initiated a pilot project to develop "climate technology web pages", for communicating with the Parties in support of the ongoing consultations under the transfer of technology consultative process, as well as to provide some near-term assistance to Parties by improving access to information on climate-friendly technologies. The pilot project demonstration site was posted on the Internet in 2000. One of the most recent efforts is the design of an Internet-based registration system for technology transfer expert centres.

9. In parallel with this effort, the secretariat pursued a pilot project to establish a technology cooperation projects inventory. The inventory focused primarily on projects and activities that have been undertaken by Parties to enhance technology transfer as a result of climate-change-related development assistance and cooperation. It explored what technology information is currently accessible on the Internet and assessed the gaps in geographical coverage and in specific services and products. It is recognized that such an inventory/database, while far from complete, could be of value to the SBSTA and the Parties by allowing analysis of the direction, magnitude and type of technology flows and by providing a source of information on projects which could be emulated and replicated.

10. The CTI has developed a search engine specifically to help users to access quality information on environmentally sound technologies, know-how and practices. A key capability of this search engine is that it allows for an advanced search of bibliographic information by energy sector, technology, region and source document. The secretariat is cooperating with CTI and is currently assessing the possibility of using this engine in its technology information system.

11. This report should be read in conjunction with the previous documents prepared by the secretariat on these topics: "Initial report on and inventory and assessment of technologies to mitigate and adapt to climate change" (FCCC/SBSTA/1996/4 and Add.1 and 2), "Options for technology information centres and networks" (FCCC/SBSTA/1998/INF.2), and "Technology and technology information needs arising from the survey of developing country Parties" (FCCC/SBSTA/1998/INF.5).

III. DISCUSSION

A. Recent activities

12. Since the last progress report presented at SBSTA 12, the secretariat undertook the following activities in response to the above mandate:

(a) A review and update of the technology cooperation projects inventory. The inventory contains at present some 1,200 projects and programmes (400 new entries), including: Global Environmental Facility climate projects and programmes, projects cited in National Communications of Annex I Parties, projects cited in consultative process submissions, Activities Implemented Jointly projects, projects identified by the OECD/DAC (in a consultant report), United States and German technology cooperation reports, projects cited in initial national communications of Parties not included in Annex I to the Convention, some bilateral projects not reported in national communications of Annex I Parties, and some multilateral projects and programmes such as non-GEF related activities of UNEP, UNDP, UNIDO, regional development banks and other multilateral implementing agencies;

(b) Redesign of the inventory databases and extension of their coverage. New data fields have been added (such as CO_2 reduction, project status, project elements, project officer, project URL, multiple contacts, project categories) in order to provide additional information on the projects included in the inventory;

(c) Review of COP and SBSTA documents relating to the subject matter as well as other documents such as those produced within the technology transfer consultative process and use of the information contained in these documents, such as the compilation of existing technology information centres and coastal zone centres and lists of experts involved in the technology transfer consultative process, to establish several new databases;

(d) Design and development of a functional prototype of an Internet-based technology information system which provides access to information on the development and transfer of environmentally sound technologies under the Convention, provides synergy with ongoing efforts in other organizations, and contributes to a more efficient use of the available resources within the secretariat. The basic elements and function of the prototype were presented to the Parties at the thirteenth session of the SBSTA (first and second parts);

(e) Preparation of a working paper, which contains a detailed project proposal on establishing a technology information system/clearing house and international information network distributed to Parties for comments at the second part of the thirteenth session of the SBSTA. The updated and revised version of the proposal is available in document FCCC/TP/2001/2;

(f) Continuation of its cooperation with other international organizations both in establishing means for electronic access to, and exchange of, information relating to the transfer of climate-friendly technologies and in harmonizing the project/technology classification systems used. The secretariat sent letters, requesting permission to access information available on their web sites, to GEF, OECD/DAC, IEA (Greentie, CADDET, IEAGHG, CTI), IPCC, UNEP

(maESTro), UNDP, UNIDO, World Bank (GATEWAY), EU, and to some Parties including the United States (DoE, EPA, NREL, EIA, USAID), Germany (Cleaner Production site), Japan (NEDO), Canada (CIDA) Australia (Australian GHG Office) and China (EST). All the responses received from these organizations to date have indicated their willingness to share information with the UNFCCC;

(g) Presentation of the technology information system at the informal consultations held at the first and second parts of the thirteenth session of the SBSTA and at COP 6.

(h) Redesign of the prototype technology information system to enhance its technical performance, its alignment to UNFCCC standards for information technology applications, and in order to maximize the use of existing on-line information, thereby reducing the resource implications of operating and maintaining the system;

(i) Preparation of short guidelines for testing the information technology system (available on the UNFCCC web page), and making the new system available to Parties for on-line testing.

B. Main characteristics and possible use of the technology information system

13. The technology information system complements and works with existing web sites/clearing houses of other relevant international organizations and national/regional technology information centres. It has the potential to act as a gateway for fast access to up-to-date information on the latest technology transfer projects, environmentally sound technologies and know-how,[1] and organizations and experts involved in the development and transfer of technologies.

14. It includes a search engine which enables users to access distributed sources of information such as UNFCCC, OECD, IEA and UNEP databases, performs conversions between different classifications used by these sources, and presents integrated results. Some other characteristics of the search engine are as follows:

(a) It allows a search to be made by using global criteria such as donor country, recipient country, implementing agency and text strings in the project title or project description;

(b) It enables the user to specify local criteria when searching each database. For example, the UNFCCC Technology Transfer Projects database allows project searches to be made using the following criteria: project type (such as mitigation, adaptation), project status (such as ongoing, completed, cancelled), project elements (such as investment facilitation, regulatory/technical barrier removal, demonstration project) and source of information. The OECD/DAC database can be searched using other criteria: sector of the aid (e.g. energy generation and supply, transport, industry, agriculture and forestry), the policy objectives of the aid (these objectives are tracked across most sectors and forms of aid using a "marker system") and the nature or form of the aid. (such as grants, loans, technical cooperation).

---

[1] Limited to energy supply (from mining to waste disposal).

15. Parties may update the information in the project database remotely; using the Internet, technology transfer projects can be added, deleted or updated directly by users[2] with authorized passwords.

16. Parties may use the system to access information on ongoing technology cooperation projects by countries, sectors of activity or technology type, to browse technical characteristics, economic performance and environmental parameters of different technologies, to locate possible partners or to locate experts to provide support. They may also perform side-by-side comparisons of different technologies stored in the database.[3]

17. A web message board is included to facilitate the exchange of views and experiences on the development and transfer of technologies. This feature may prove beneficial in stimulating active participation of the Parties in the technology transfer process under the Convention.

18. The system could also be useful to the secretariat in preparing synthesis reports of information provided by Parties included in Annex I to the Convention on ongoing technology transfer activities.

C. Issues for consideration

19. The guidelines for the preparation of national communications by Parties included in Annex I to the Convention, Part II: UNFCCC reporting guidelines on national communications (FCCC/CP/1999/7) required submissions of information in accordance with Article 12.3. The forthcoming national communications from Annex I Parties are due in November 2001. Hence it is not feasible in the short term for these Parties to submit information electronically for easy access via the information system. In the future, however, Annex I Parties could, on a voluntary basis, electronically update the information on their technology transfer programmes and activities in the technology information system (see paragraph 15). Other Parties could use a similar approach to provide information on technology needs.

20. Considerable institutional capacity to provide information relating to the transfer of environmentally sound technologies and know-how already exists. Much of this capacity is distributed among relevant United Nations organizations and specialized agencies, and the national and regional networks which they serve. The pilot system partially demonstrates how information sharing may be achieved through alliances between suppliers of technology information. What additional alliances should be pursued and with which organizations, and what topics should be given priority?

21. Additional issues for consideration relating to the content and performance characteristics of the system are identified in the annex below.

---

[2] There are several groups of "users" with different roles and levels of permission: administrators, secretariat staff, Parties and public users.

[3] Some of these features are under development and have limited function. Therefore, please visit the technology information system on the Internet regularly.

Annex

POSSIBLE ISSUES TO BE ADDRESSED BY THE SBSTA

I. QUESTIONS RELATING TO THE CONTENT OF THE TECHNOLOGY INFORMATION SYSTEM

1. Is the technology inventory providing information that is useful? Is this information sufficiently up to date? What additional information should be added to the projects and technologies databases? What technologies/sectors should be given priority? What additional web sites should be made available to the search engine?

2. Can the criteria previously identified by Parties as important in selecting national projects be used to determine which projects should be included in the database, or should other criteria be used? [4]

3. Little specific information is available on adaptation technology projects and practices. Should the collection of additional information relating to adaptation technologies be given a priority. If so, for which sectors?

4. Should a process be developed to receive information from Parties on a regular basis?

5. What analytical tools should be added and for what purposes (e.g. to make simplified cost estimations)?

6. What sources of information should be used? Should information provided by NGOs, the business community and journals be included?

7. Is a "news" service needed? If yes, what should this service provide?

II. QUESTIONS RELATING TO THE PERFORMANCE OF THE TECHNOLOGY INFORMATION SYSTEM

1. Is the speed of the search engine acceptable?

2. Is the capability to do side-by-side comparisons of technologies useful? Should other tools be developed to compare technologies?

3. Is the technology transfer web message board an appropriate means for exchanging experiences and sharing technological know-how?

4. Is the capability to search for UNFCCC documents relating to the development and transfer of technologies adequate?

---

[4] FCCC/SBSTA/1998/INF.5, paragraph 14 (a): "Five criteria were suggested by the Parties as potentially important in selecting environmentally sound technologies: financial (availability of low-interest loans, multilateral aid, commercial credit, and grants), economic (investment cost and profitability of technologies considered), technical (reliability, ease of operation, and maintenance and service infrastructure for technologies considered), social (acceptability, contribution to poverty alleviation, and impact on gender relations of technologies considered), and environmental (reducing emissions levels, enhancing capture of greenhouse gases in sinks, contribution to solving present environmental problems and possible environmental tradeoffs)."

5. Is the information dissemination through the Internet sufficient? Is there a need to distribute information on CD-ROMs, diskettes and/or by newsletter?

6. Do the capabilities of the search engine meet your expectations? If not, what capabilities should be added and/or modified?

Appendix

LIST OF ABBREVIATIONS

CADDET	Centre for Analysis and Dissemination of Demonstrated Energy Technologies
CIDA	Canadian International Development Agency
CRS	Creditor Reporting System
CTI	Climate Technology Initiative
DAC	Development Assistance Committee of the Organisation for Economic Co-operation and Development
DoE	United States Department of Energy
EIA	United States Energy Information Administration
EPA	United States Environmental Protection Agency
EST	Environmentally Sound Technologies
EU	European Union
Gateway	Development Gateway (World Bank)
GEF	Global Environmental Facility
Greentie	Greenhouse Gas Technology Information Exchange
IEA	International Energy Agency
IETC	International Environmental Technology Centre (UNEP)
IPCC	Intergovernmental Panel on Climate Change
IEAGHG	IEA Greenhouse Gas R&D Programme
OECD	Organisation for Economic Co-operation and Development
maESTro	a searchable EST database developed by UNEP/IETC
NEDO	New Energy and Industrial Technology Development Organization
NREL	United States National Renewable Energy Laboratory
UNEP	United Nations Environment Programme
UNIDO	United Nations Industrial Development Organization
URL	Uniform Resource Locator, an address of a web-page or any other file on the Internet
USAID	United States Agency for International Development

- - - - -